

What We Claim Is:

1. A method for carrying out upshifting from an initial gear into a target gear in a twin-clutch transmission of a vehicle, wherein, when an incorrectly pre-selected target gear is detected, the engine torque (M_{Motor}) of the vehicle is modified in such a manner that the output torque (M_{Output}) is reduced if the correct target gear is engaged.

2. The method as described in Claim 1, wherein the engine torque (M_{Motor}) is decreased at the beginning of a pulling upshift until the target gear is engaged and the engine torque (M_{Motor}) is thereafter increased to a driver's desired torque (M_{FW}).

3. The method as described in Claim 1, wherein the engine torque (M_{Motor}) is maximally decreased to a reduced engine torque (M_{Red}).

4. The method as described in Claim 3, wherein the reduced engine torque (M_{Red}) is determined according to the following equation:

$$M_{Red} = M_{FW} \left(1 - \frac{i_{alt} - i_{neu}}{i_{alt}} \right)$$

M_{FW} = driver's desired torque;

i_{alt} = ratio of the initial gear;

i_{neu} = ratio of the target gear.

5. The method as described in Claim 1, wherein in a first phase, when an incorrectly pre-selected target gear is detected, a maximum engine torque (M_{Red}) to be reduced is determined, if the engine torque (M_{Motor}) is greater than the maximum engine torque (M_{Red}) to be reduced, the engine setpoint torque (M_{Mot_soll}) is decreased to the reduced engine torque (M_{Red}) until the target gear is engaged, if the engine torque (M_{Motor}) corresponds to the maximum engine torque to be reduced (M_{Red}), the system waits until the target gear is engaged, the first phase being terminated by the engagement of the target gear, and in a second phase a crossover is carried out, the engine torque (M_{Motor}) being increased to a driver's desired torque (M_{FW}).

6. The method as described in Claim 5, wherein at the beginning of the second phase a check is made of whether the engine torque (M_{Motor}) is less than the driver's desired torque (M_{FW}); if so, the engine setpoint torque (M_{Mot_soll}) is increased until the driver's desired torque

(M_{FW}) is reached, and then the particular clutch torques (M_{Kupp1} , M_{Kupp2}) on the clutches are determined, the second phase thereafter being terminated.

7. A twin-clutch transmission for a vehicle, especially for carrying out the method as described in Claim 1, wherein at least one device is provided for detecting an incorrectly pre-
- 5 selected target gear and for changing the engine torque (M_{Motor}).